

## **Historic, archived document**

Do not assume content reflects current scientific knowledge, policies, or practices.



2,91

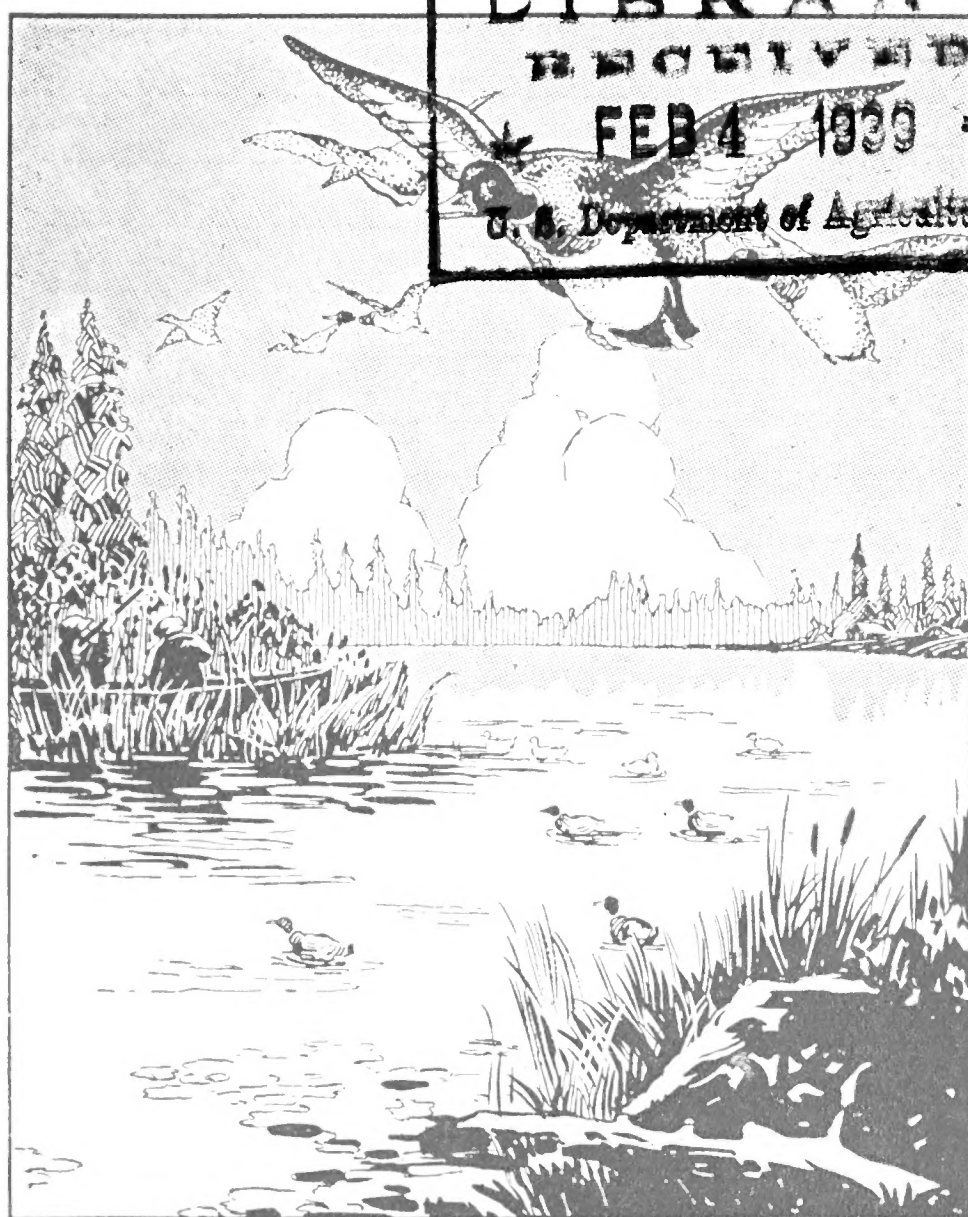
512385

**NATURAL FOODS**

ATTRACT

# WILD DUCKS, FISH AND OTHER GAME

*How to Get Your Share*



LIBRARY  
RECEIVED  
★ FEB 4 1939 ★  
U. S. Department of Agriculture

PLANT NOW      RESULTS      THIS YEAR  
SPECIAL  
**40%** OFF PRICES LISTED  
IN THIS BOOKLET,

**Wisconsin Aquatic Nurseries**

P. O. Box 331

Oshkosh, Wis., U. S. A.

# CONTENTS

Introduction .....	1-2
Aquatic Plants and Percentage of Each Eaten by the Best known Wild Ducks .....	3
Wild Rice .....	4-5
Wild Celery .....	6-7
Sago Pondweed .....	8
Wapato Duck Potato .....	9
Wampee Duck Corn .....	10
Wild Duck Millet .....	11
Smartweed .....	11
Ducksmeat or Duckweeds .....	12
Coontail .....	12
Elodea .....	12
Water Milfoil .....	13
Widgeon Grass .....	13
Eel Grass .....	14
Muskgrass .....	14
Spatterdock or Yellow Waterlily .....	15
White Waterlily .....	15
American Lotus .....	15
Deep Water Duck Potato .....	16
Water Cress .....	16
Sweet Flag & Water Iris .....	16
Naias Bushy Pondweed .....	17
Brownleaf Pondweed .....	17
Water Shield .....	17
Burreed .....	18
Cattails .....	18
Reedgrass .....	18
Bulrush .....	18
Duck Wheat .....	19
Milo Maize .....	19
Chufa Nutgrass .....	19
Important for Upland Game Birds .....	20
What Constitutes a Good Game Refuge .....	21
Information for the Muskrat Farmer .....	22-23
Importance of Aquatic Vegetation for Game Fish .....	24
Plants Important to Game Fish .....	25
Wild Ducks Must Eat .....	26
Order Blank .....	27
Terms .....	28
Guarantee .....	28
We Plan—Plant and Make Attractive Your Marshes, Ponds or Streams .....	29

# **"All Together--Heave"**

"This world has never known a country equal to ours in size, having greater natural beauty of conformation, diversity of scenery and wealth of animal and plant life.

. . . . "Only as a day in the evolution of the world is 300 years, and after this length of time, *we, today*, are called upon to answer for our stewardship of plethora of riches and beauties. We have handled these natural wonders, this profusion of riches in a spirit of insane recklessness. . . . .

. . . . "Today we are squarely facing the problem of reparation for we must make reparation or we must meet disaster. There is no question of whether we will or not, we must as a matter of protection. . . . .

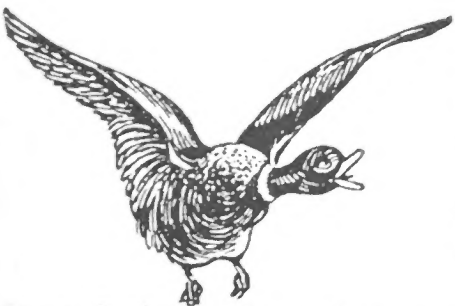
. . . . "We must save every brook and stream and lake. . . . . Our waterfowl, our fish and other game.

. . . . "We must save the natural resources which remain to us. . . . . Now and not tomorrow.

. . . . "If we desire comfort, food and beauty for ourselves and any sort of a heritage at all to bequeath to our children each of us must lend a hand. Those of us who see the vision and most keenly feel the need, must furnish the motive power for those less responsive. . . . . Do your part now.

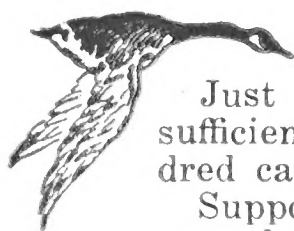
## **Foreword**

A practical game restoration program. In the following pages of this booklet are given suggestions and helpful ideas derived thru years of experience by specialists on the development of attractive places for Waterfowl, Fish, Muskrats and Upland Game Birds. How to propagate natural food and cover plants thereby improving the Hunting on both land and waters and better the Fishing in ponds and streams.



Like the Indians of old who wandered over prairie, mountain and stream in search of food to the better hunting grounds, so do the wild life migrate in search of the kinds of foods they like. Similar to the human being, they like a change of diet, or a variety of foods, some species of wild life prefer certain foods more than others as the Mallard Duck searches for the Wild Rice so does the Canvas-back Duck scan the water for Wild Celery. Again in comparison, as the people populate the rich lands of Illinois near the great blue waters of Lake Michigan, against, the sandy deserts of Arizona. Why? Because in the land of prosperity they find contentment, plenty of food, shelter and enjoyment with the least exertion. It's the same with wild waterfowl, fish or game. Great numbers will congregate where they find a plenty of their favorite foods, good cover, greater protection and the easier feeding conditions.

## SUPPOSE



Just suppose you had a pasture with sufficient food growing to keep one hundred cattle throughout the season.

Suppose instead of one hundred you turned one thousand head in there what would happen?

They would either starve or break out and wander into other fields where food is more plentiful.

## IT'S THE SAME WITH WILD DUCKS OR OTHER GAME

When the Wild Ducks stop on your waters or the game at your preserve and find little or no food, they go on their way in search of better feeding grounds, but if they find plenty of their natural foods growing there you can't drive them away.

To have the best of Hunting or Fishing all that is necessary is to start a growth of their favorite foods. Provide cover and give them a chance, they will do the rest. Soon you will have game or fish in abundance. One planting of these hardy perennials makes a permanently attractive place.

## GOOD PLANTING MATERIALS IMPORTANT

Aquatic seeds, tubers and plants are of a perishable nature and must be carefully handled by persons experienced in growing, handling and planting them to insure the expected results. Poor materials are a waste of time and money, no matter how cheap they may be. We have learned of many failures in growing Wild Rice and other aquatic materials were due to the fact that the seeds and tubers planted had been improperly handled by some amateur seedsman or naturalist who did not know how to care for same. Worthless materials were acquired.

## PIONEER AQUATIC NURSERYMEN

You can depend upon Wisconsin Aquatic Nursery with years of experience behind them and a reputation for Fair and Square dealings. Our materials are grown on properties from the far north to the extreme south to meet all conditions and climates. These seeds, tubers and plants are produced on twelve different properties located in various parts of the United States and Canada from the Gulf of Mexico to the interior of Canada and the Pacific Coast to Atlantic Ocean.

During our years of specializing in the development of more attractive feeding and breeding grounds for waterfowl, fish and game, we have studied the habits and haunts of this wild life. We have examined the contents of thousands of stomachs to determine their principal foods and studied the propagation of the natural foods of prime importance.

On the following pages it tells what, where, when and how to plant these natural foods. How to improve your hunting on waters or in the field. How to increase your sport with rod and reel.



# OSHKOSH, WISCONSIN

## AQUATIC PLANTS AND PERCENTAGE OF EACH EATEN BY THE BEST KNOWN VARIETIES OF WILD WATERFOWL

This list compiled by us from data obtained from bulletins published by the U. S. Department of Agriculture, Bureau of Biological Survey, Washington, combined with knowledge gained by the examination of the contents of stomachs of wild waterfowl, taken from different sections of U. S. and Canada.

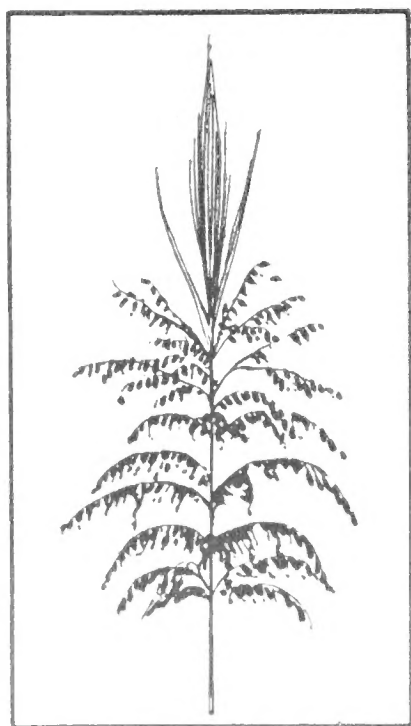
MALLARD 10% of Food Animal 90% of Food Vegetation	PINTAIL (Known as Sprig) 87% of Food Vegetation 13% of Food Animal	REDHEAD 14% of Food Animal 86% of Food Vegetation
22% Sedges Cyperus Rushes Burreed Chufa Wampee	28% Pondweeds Brownleaf Redhead Grass Sago Pond Plant Eel Grass Widgeon Grass Naiaes	30% Wild Celery 17% Pondweeds Sago Pond Plant Naiaes Redhead Grass Brownleaf Eel Grass Widgeon Grass
14% Grasses Wild Rice Wild Millet	22% Sedges Bulrush Three Square Rush Chufa Wampee	9% Wapato and Delta Duck Potato
9% Smartweeds Duck Wheat	11% Grasses Wild Rice Wild Millet	5% Duckweeds 5% Muskgrass 6% Grasses Wild Rice Wild Millet
9% Pondweeds Sago Pond Plant Naiaes Redhead Grass Brownleaf Eel Grass Widgeon Grass	7% Smartweeds Duck Wheat	6% Sedges Cyperus Rushes Burreed Wampee
6% Duckweeds Duck Meat	5% Muskgrass	4% Waterlily Banana " Yellow " Wokas American Lotus
6% Coontail	4% Delta and Wapato Duck Potato	1% Water Milfoil
5% Wild Celery	3% Waterlily Banana " Yellow " Wokas American Lotus	1% Coontail
4% Hackberries	1% Duckweeds	2% Unidentified and Miscellaneous
4% Wapato and Delta Duck Potatoes	1% Milfoil	
3% Acorns	1% Wild Celery	
4% Waterlily Banana " Yellow " American Lotus	4% Unidentified and Miscellaneous	
3% Water Milfoil		
1% Muskgrass		
TEAL Blue-Winged 27% of Food Animal 73% of Food Vegetation	BLACK DUCK 24% of Food Animal 76% of Food Vegetation	CANVASBACK 8% of Food Animal 92% of Food Vegetation
22% Sedges Cyperus Rushes Chufa Wampee	33% Pondweeds Sago Pond Plant Naiaes Redhead Grass Brownleaf Eel Grass Widgeon Grass	38% Wild Celery 18% Pondweed Sago Pond Plant Naiaes Redhead Grass Brownleaf Eel Grass Widgeon Grass
16% Pondweeds Sago Pond Plant Naiaes Redhead Grass Brownleaf Eel Grass Widgeon Grass	11% Grasses Wild Rice Wild Millet	8% Wapato and Delta Duck Potato
14% Grasses Wild Rice Wild Millet	9% Sedges Bulrush Burreed Cyperus	6% Waterlily Banana " Yellow " American Lotus
9% Smartweeds Duck Wheat	6% Smartweeds Duck Wheat	6% Muskgrass 5% Grasses Wild Rice Wild Millet
4% Muskgrass	5% Waterlily Banana " Yellow " Wokas American Lotus	5% Sedges Cyperus Rushes Wampee
2% Waterlily Banana " Yellow " Wokas American Lotus	2% Coontail	1% Coontail
1% Water Milfoil	4% Wapato and Delta Duck Potato	1% Water Milfoil
1% Burreed	3% Wild Celery	1% Duckweeds
4% Unidentified and Miscellaneous	1% Muskgrass	3% Unidentified and Miscellaneous
	2% Miscellaneous	

This is the average percentage of foods covering a large territory and wide range of growing conditions, which may vary in different localities where some plants grow more abundantly than others.



## WILD RICE

### TO LURE THE MARSH DUCKS



Wild Rice Head

Mallards, Pintails, Black-ducks, Teal, Widgeon and Canada Geese fly hundreds and hundreds of miles to the Wild Rice Marshes. During Fall they find the ripened grains in great abundance, also shelter and hiding places among the tall growth. If there are several Wild Rice marshes in the vicinity, great numbers of these waterfowl will be seen passing from one marsh to the other. In the north only the freezing water will drive them out. Farther south they will stay on these good feeding grounds throughout the entire winter. Wild Rice is also very important as a

Muskrat food.

A field of Wild Rice once established makes a permanent feeding grounds, for Wild Rice reseeds itself from year to year.

### WHERE TO PLANT

The best places for planting wild rice are in fresh water streams, sloughs, marshy lakes or ponds, having an outlet, soft mud bottom and waters from 6 inches to 3½ feet in depth. In sunny sheltered bays or coves on larger lakes, streams or rivers where it is protected from waves or strong currents are excellent places to plant. If planted upstream, parts of the plants and some of the seed produced, will be carried downstream each year, and become established in suitable places all along the waterway.

Near the seacoast wild rice will thrive in streams where the waters are not salty to taste and where the tide is not over four feet. Tame rice fields that depend on tides for their water supply are usually very good places for growing wild rice, or in old abandoned rice fields where there is a change of water.

Wild Rice is easy to grow. It does very well in Canada and the United States. It has proven a marked success in waters where conditions were favorable. A free change of fresh water is the main requirement, stagnant waters are injurious.

### PLACES NOT SUITABLE

Years of experience has taught us that Wild Rice does not do well in landlocked lakes or ponds (those having no outlet) waters salty to taste, strongly alkaline or on white marl bottom soil. Such places as along the Mississippi River and its tributaries where the water rises and stays ten feet or more above the low water mark for several weeks during spring are also unsatisfactory. Wild Rice will be drowned out by such a condition. If conditions such



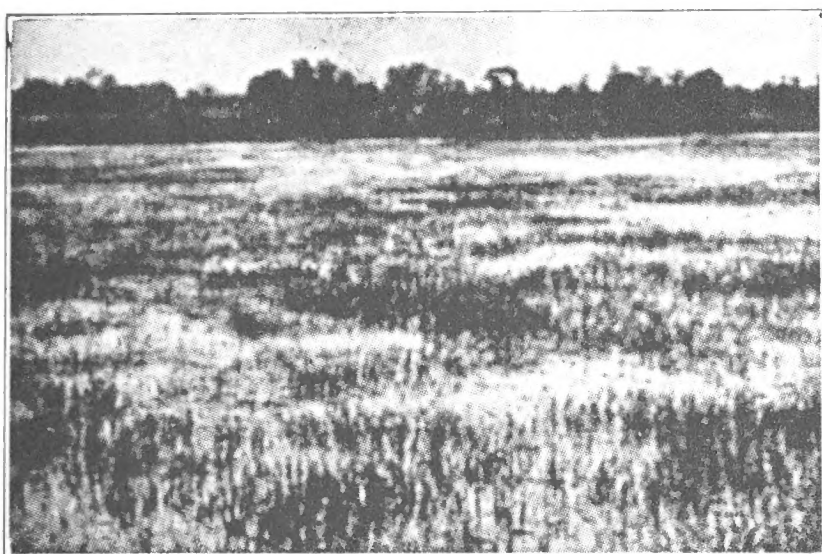
# OSHKOSH, WISCONSIN

---

as described exist in your waters then we suggest the planting of other duck foods which are suited to such places, find them described on the following pages.

## WHEN TO PLANT

Wild Rice Seed may be planted at any time while the waters are free from ice. We suggest planting as early as possible to give full advantage of the growing season so that the expected results may be obtained, fully matured plants, lots of feed and plenty of ducks. Good seed is important, we supply only the best, hardy Giant Wild Rice Seed, guaranteed to grow (see guarantee on page 28).



A Wild Rice Bed 45 Days After Planting

## HOW TO PLANT

Wild Rice seed is very easily planted, all that is necessary is to broadcast the seed on the waters ranging in depth from 6 inches to 3½ feet. Plant where there is a fairly rich bottom soil, scattering about one handful of seed to each two or three square yards. The seed will immediately sink to bottom and within a short time will bury itself in the bottom soil. We urge you to plant early as possible for in late spring the seed is inclined to sprout which makes it necessary to mix the seed with mud in order to sink it to bottom. Sprouted seeds will float on the waters and is more bothersome to plant.

Our supply of wild rice seed is very limited, therefore, we suggest that you place your order early and be sure of your supply. We will store your seed until you wish shipment. Complete planting instructions are sent with each order. Fifty pounds will plant an acre.

Only 70c per lb., in lots of 10 pounds or more.

Smaller quantities, 75c per pound.

F. O. B. Oshkosh—less special discount.

Wisconsin Aquatic Nurseries  
Oshkosh, Wis.  
Gentlemen:

West Barrington, R. I.  
April 3, 1931.

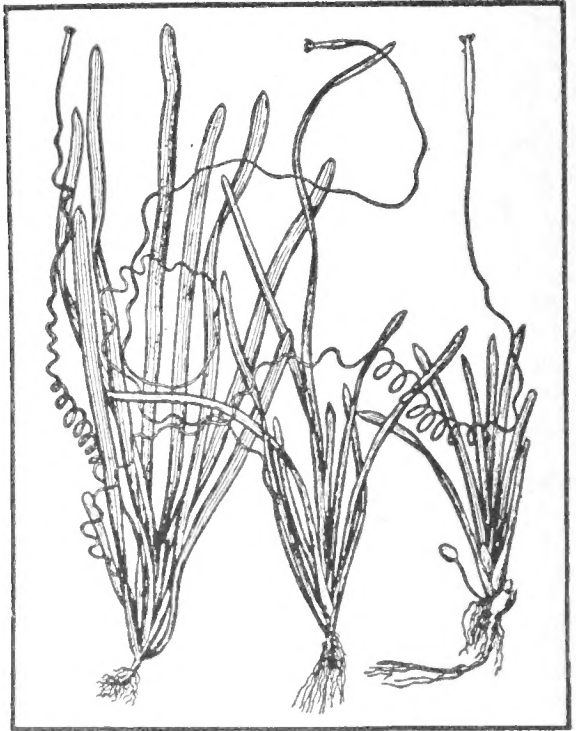
Enclosed you will find check which will pay for Rice seed I received. An experienced Hunter and Game Farmer helped me and he said, "It is the best I've seen from three orders I have received from different concerns I have dealt with." I also think it is very fine seed and I am sure of good results.

Yours for conservation,  
Signed: WILLIS E. BLOUNT,

## WILD CELERY

BRINGS THE DUCKS

Canvasbacks, Red-heads, Bluebills, Mallards and Blacks darken the sky over the wild celery beds. A few years ago it was no trick at all to go out and get the limit of wild ducks, neither is it today where the Wild Celery beds abound. But, many of the vast Wild Celery beds of former years have disappeared; drainage, pollution and other causes have destroyed many and many an acre of them. We must utilize every lake, pond and stream to prolong this sport, reestablish those Wild Celery beds.



Wild Celery

You will find no better way to increase your enjoyment during your hours of recreation than shooting these wild ducks. Thousands of them can be attracted to your local waters by establishing a growth of Wild Celery.

All parts of the plant are eaten by the Wild Ducks, but the tender winterbuds and rootstocks are relished most. Once the Wild Celery is established in your waters it will grow there permanently. There is no danger of the ducks destroying the growth for there are many tubers which break off remaining in the mud and many plants never molested which will produce the following year, it also reseeds itself.

### IMPORTANT FOR FISH

Wild Celery being a submerged water plant is also important as a food and cover plant for fish. The plants support countless numbers of minute insect and animal life which fish depend upon for food. Fish also eat portions of the plants themselves. A bed of Wild Celery will keep your waters pure and clear and well oxygenated, which is important for fish life. The plants provide shelter and hiding places for young fish, where they can escape from their enemies, assuring many more of them reaching maturity. Wild Celery is an excellent winter food for Muskrats.

### WHAT AND WHEN TO PLANT

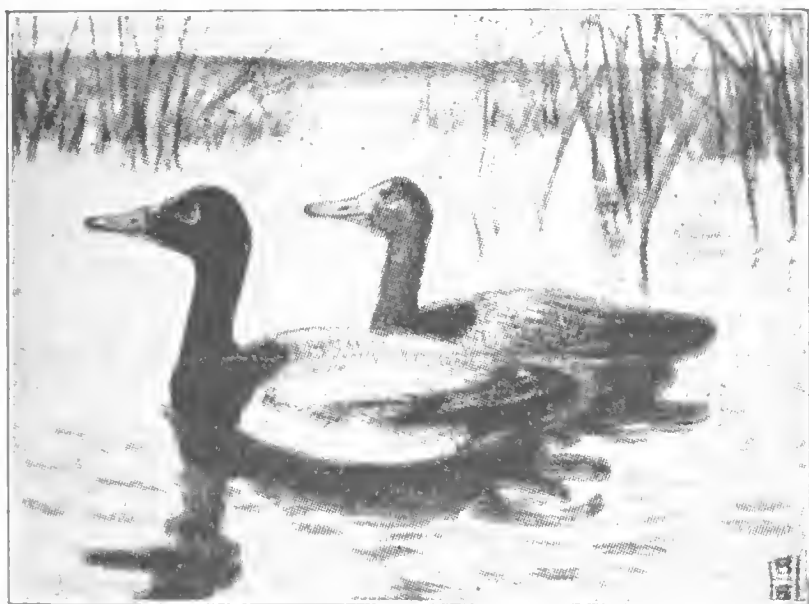
The Wild Celery propagates in three ways, by seed, runners and winterbuds, a sort of tuber. It is by planting these winterbuds (tubers) that one can establish a quick and very good growth of Wild Celery in their waters. Results may be noticed by the following fall. Tubers may be planted in spring, summer or fall.

# OSHKOSH, WISCONSIN

---

## WHERE TO PLANT

Wild Celery grows best in waters from 2 to 10 feet in depth preferably on a mud bottom, although it will grow on sandy loam or clay. It requires fairly fresh waters, that is waters which are not salty to taste or alkaline. This plant does not grow well in landlock lakes or ponds.



Canvasback

## HOW TO PLANT

Get a quantity of clay and moisten until it becomes about the consistency of putty. Then take a handful of clay and mould it into a ball about the size of a tennis ball. Break this clay ball in two and place 2 of the Wild Celery tubers between the halves and press firmly together. After a quantity has been made take them to the desired planting place and drop one by one into the waters about 3 to 6 feet apart. We furnish more complete planting instructions with each order.

One Thousand Tubers plant one Acre.  
Price \$14, per \$1,000; \$2 per 100 Tubers,  
Less special discount.

Wisconsin Aquatic Nurseries  
Oshkosh, Wis.

Oct. 8, 1929.

Gentlemen: Enclosed please find check for Wild Duck Food. Just writing a few lines to let you know about the results obtained from your Wild Rice and Wild Celery I purchased from you last fall. Up to the time it was seeded there was never a duck on the pond to my knowledge. About a week ago there were about thirty ducks on it of which we killed five and I believe that the Wild Duck Food sure was what attracted them. I am going to seed another pond this fall.

Signed: Sincerely yours, EMIL GILLHAM,  
R. 2, Box 93, Fair Grove, Mo.



Redhead

## SAGO PONDWEED

### BEST ALL ROUND DUCK FOOD

Early in the season the Sago Pondweed will attract Mallards and Teal, later the Canvasbacks and other divers. It's the most important of water plants for both wild ducks and fish. All species of wild ducks feed upon its roots, tubers and seeds which are produced in abundance. In fact all parts of the plant are eaten by the wild ducks, but they cannot destroy the growth for it has a very strong root system which makes a net work thru the bottom soils. Many roots and tubers remain unmolested to produce a growth the following year. One planting will make a permanent growth. Sago Pondweed produces more food for the Wild Ducks than any other aquatic plant. It is also an important food plant for the Muskrats.

### EXCELLENT FOR FISH

Like the Wild Celery the Sago Pondweed also provides food, cover and protection for the fish. It purifies and clarifies the waters, takes up the poisonous gases and puts forth oxygen into the waters. Various kinds of insect life deposit their larva on these plants which is food for the small fish. The Sago Pondweed plants shade and cool the under waters and will not only improve the fishing but also the quality of the fish.

### WHAT AND WHEN TO PLANT

The tubers of Sago Pondweed can be planted during spring, summer or fall. They will produce some food for the Wild Ducks the following fall. These plants have a very strong root system and are indestructible by Carp.

### WHERE TO PLANT

These plants are very hardy and will grow in almost any waters except salt waters. On practically every kind of bottom soil except gravel. They are submerged plants and do best in waters from 2 to 6 feet in depth, altho Sago Pondweed will grow in water from 1 to 10 feet in depth. When possible plant where there is some mud.

### HOW TO PLANT

The tubers are planted in the same manner as Wild Celery tubers (see how to plant on page 7.) Complete planting instructions are furnished.

One Thousand Tubers will plant  
an Acre.

Price \$20 per 1,000 tubers, \$3 per 100,

Less special discount.



Wisconsin Aquatic Nurseries  
Oshkosh, Wis.

May 6, 1926.

Dear Sirs: Enclosed please find my check for \$21.00 for which you will please send me at once 1000 Wapato Duck Potatoes. You shipped me some last year and they did very well.

On February 10 you sent me 500 Sago Pondweed Tubers which are coming fine.

Trusting that you will express the above at once, I am

Sincerely yours,

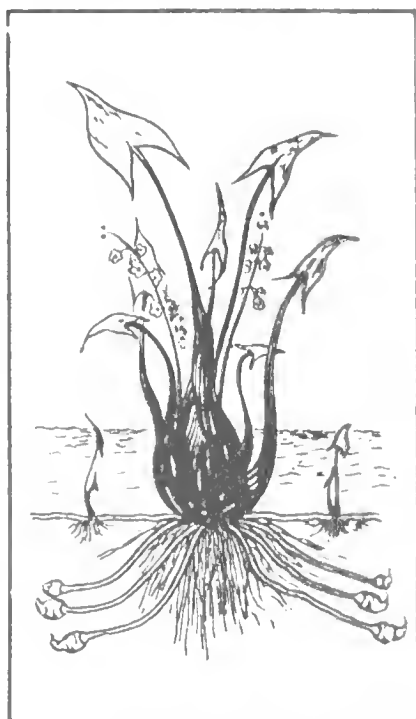
CARL G. LIEBE.

545 E. 14th St., N., Portland, Oregon.

# Wapato Duck Potato

## RAPID GROWING DUCK COAXER

The Wapato Duck Potato is a very good all around Wild Duck Food. Canada Geese and Swan are also very fond of this plant. The species of Wild Ducks which will feed upon Wapato depends largely upon the water conditions under which it grows. If the waters remain nearly the same level the year around, Mallards and other shallow water ducks will feed upon the tender shoots, tubers and seeds which it produces. In places where there is an overflow or the water deepens during fall and winter, Canvasbacks and other divers will feed upon Wapato.



Duck Potato

As a Muskrat food the Wapato is excellent.

## WHAT AND WHEN TO PLANT

Wapato propagates largely by tubers which may be planted during spring or fall. Tubers planted this year will produce fully matured plants the following fall.

## WHERE TO PLANT

This plant is very hardy and will grow well in most any inland waters excepting those which are very strong of alkali or salts. It does the best in a fairly rich soil on damp lowlands, mud flats or in water from 1 inch to 1 foot in depth.

## HOW TO PLANT



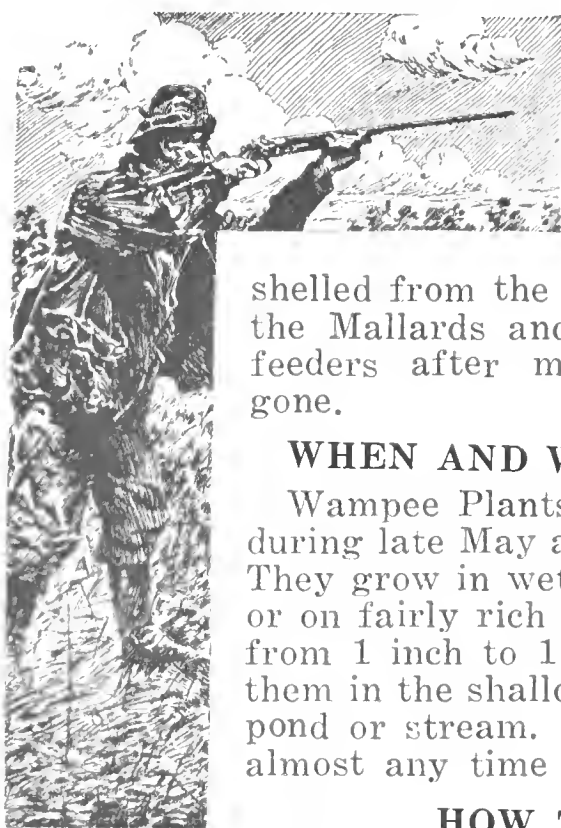
Sago Pondweed (see page 8)

The tubers of the Wapato Duck Potato are very easily planted, all that is necessary is to step into your boots or waders and take a quantity of tubers to the place you wish to plant. Then push each tuber about one or two inches deep into the bottom soil, planting about three feet apart. More complete planting instructions sent with order.

One thousand tubers plant one acre.  
Only \$14 per 1,000 Tubers; \$2.00 per 100,  
Less special discount.



## Wampee---Duck Corn



A good Wild Duck Coaxer. Marsh ducks are particularly fond of the Wampee Seeds which shell off the stock in late fall like kernels of corn

shelled from the cob. It will help hold the Mallards and other shallow water feeders after many other foods are gone.

### WHEN AND WHERE TO PLANT

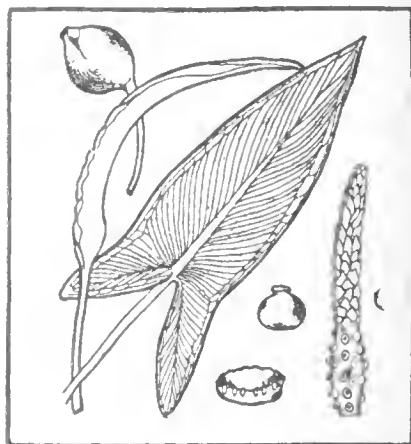
Wampee Plants may be transplanted during late May and the month of June. They grow in wet marshy boggy places or on fairly rich mud bottom in waters from 1 inch to 1 foot in depth. Plant them in the shallow waters of any lake, pond or stream. Seed may be planted almost any time of the year.

### HOW TO PLANT

Just step into your rubber boots and take a spade or spading fork and a quantity of plants to the place you intend planting. With the spade or fork lift a bit of soil, then place the roots of the plant into the opening after which replace the soil and step it in firmly with your boot.

Wampee Seed may be planted by mixing same with a good sticky clay and scattering small parts of the mixture here and there in the shallow waters. If it is your desire to plant this seed in a wet marshy place, simply make a hole with a stick, drop in several seeds and step the soil together closing the hole. We will furnish complete planting instructions with order. Five hundred plants or ten pounds seed will plant an Acre.

Price \$10 per 100 plants,  
\$70 per 1000 plants,  
\$0.80 per pound seed,  
Less special discount.



Wampee

Laurel Oil & Fertilizer Company  
Laurel, Miss.

Wisconsin Aquatic Nurseries  
Box 331, Oshkosh, Wis.

October 12, 1931.

Gentlemen:

About eight weeks ago I bought quite a bit of seed, etc., from you gentlemen. Among this shipment was some of your Muskgrass seed spores.

All of the seeds furnished are quite satisfactory except the Muskgrass seems to be spreading awfully fast; in fact I think it is spreading entirely too much. As explained to you in my first letter, our Lake has about 120 acres of open water and I wondered if this Muskgrass will spread over the entire lake?

Will it lie down in the dead winter? How would you suggest that it be controlled?

For your information, we have quite a few ducks already coming in and they seem very fond of this Muskgrass as well as the Wild Rice, Wild Celery, Sago Pondweed, etc.

Very truly yours,

Signed: D. P. GRANBERRY,  
Box 926, Laurel, Miss.



## Wild Duck Millet

ATTRACTS THE SHALLOW WATER DUCKS

Also known as Goose Grass. Ranks almost as high as Wild Rice as a good Duck Coaxer in localities where Wild Rice cannot be grown. Wild Duck Millet grows to be 4 to 6 feet high and makes very good blinds as well as producing a large seed head with an abundance of food for the Wild Ducks.

### Smartweed

A popular food with the Mallards. On the low-lands where Smartweed grows, from Canada to the Gulf, Mallards will surely stop during their fall flight. They are particularly fond of feeding upon Smartweed in places which overflow in fall, where they may dibble the seeds from the mud in shallow waters.



Wild Duck Millet  
Seed Head

### IMPORTANT FOR QUAIL

Both the Wild Millet and Smartweed are considered as important food plants for upland game birds. They produce an abundance of seeds which Quail and Grouse are very fond of. In studying the habits of the game birds we find that twice daily they go to the nearby ponds or streams for water and like to linger there and feed.

### WHAT AND WHEN TO PLANT

Seeds of both Wild Duck Millet and Smartweed may be planted during spring, summer or fall.

### WHERE TO PLANT

The Wild Duck Millet and Smartweed grow under similar conditions on damp lowlands and mud flats. They have proven very good along the Illinois and Mississippi Rivers, also on old Rice fields and in such places as can be flooded during the duck season. They do best on a fairly rich soil.

### HOW TO PLANT

It is well to break the soil where possible. One may use a drag, disc or grub hoe. Then sow the seed broadcast, after which drag or rake the planted area so as to cover the seed.

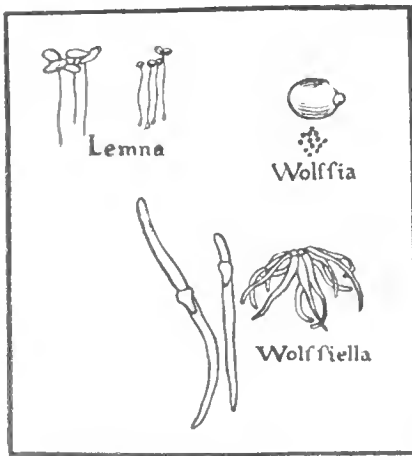
Forty pounds will plant one acre.

Wild Duck Millet or Smartweed Seed

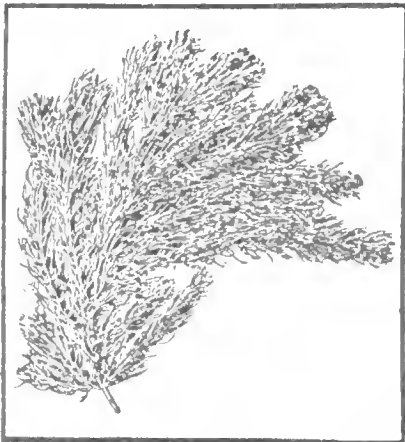
Price \$15 per 100 lbs.; per pound, 20c.

Less special discount.

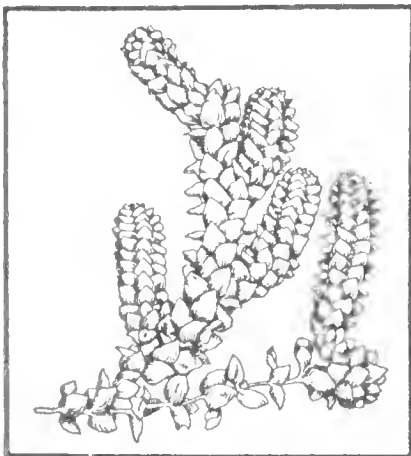
## Ducksmeat or Duckweed



Ducksmeat



Coontail



Elodea

All kinds of Wild Ducks feed upon the Duckweeds. The shallow water feeders make up a larger percentage of their food of this plant than the divers, because it grows largely in shallow waters. It is also important for fish.

### SURFACE FLOATING DUCKWEEDS

This is a very small plant (less than  $\frac{1}{4}$  inch in size) which floats in great clusters upon the surface of the waters.

### SUBMERGED FLOATING DUCKWEEDS

Another very small plant (less than  $\frac{1}{4}$  inch in size) which floats in great masses, submerged near the bottom.

## Coontail Plants

Seeds of the Coontail Plant are eaten by many species of Wild Ducks, occasionally they will feed upon the foliage. This plant provides both food and cover for fish.

## Elodea

The Elodea is of value as a food plant for marsh ducks. It has a greater value as a food and cover plant for fish. It is also a very good water purifier.

### WHAT, WHEN AND WHERE TO PLANT

All of the above plants grow under very similar conditions and are transplanted in the same manner during the months from April to October. These plants should be transplanted into fresh waters from 1 to 6 feet in depth on any kind of bottom in ponds or quiet sheltered bays and coves. The above plants are indestructible by Carp.

### HOW TO PLANT

Just drop a handful of plants into the waters about every two feet.

Five bushels of plants to the acre.

Price \$4.00 per bushel plants.

Less special discount.

Wis. Aquatic Nurseries,  
Oshkosh, Wis.  
Gentlemen:

May 13, 1929.

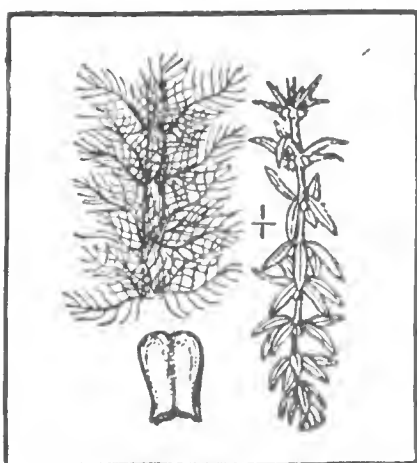
You may be interested that the planting we made of your materials last year was very successful.

Thanking you for your very courteous services, I am  
Yours truly,

ROBERT OGDEN.

## Water Milfoil

An excellent plant for fish ponds. Water Milfoil supports numerous kinds of animal life which is food for the fish. It furnishes cover, also shades the under water and purifies it, thereby, keeping it cool and fresh during the hot summer. It is also of value as a water-fowl food.



Water Milfoil

## Widgeon Grass

Redheads, bluebills and Canvasbacks feed upon the roots, seeds and leaves of Widgeon Grass. It is considered the best Wild Duck Attraction for brackish waters. Mallards and other marsh ducks feed upon Widgeon Grass during low tide where it grows in bays and streams which are affected by tides.



Widgeon

### WHEN AND WHERE TO PLANT

Water Milfoil plants are transplanted from April to October. It produces most satisfactorily in fresh waters from 3 to 9 feet in depth on a mud bottom in slow running streams or sheltered bays and coves.

Widgeon Grass plants are also transplanted during spring and summer and is a brackish water plant. It grows in salt water but never in that of full ocean strength. It thrives in rivers affected by ocean tides. This plant grows in waters from 1 to 10 feet in depth on a mud bottom.

### HOW TO PLANT

Both the Water Milfoil and Widgeon Grass plants are planted by simply pushing the roots of the plant down into the mud with an oar or a paddle in two to six feet of water.

Three bushels of plants to the acre.

Price Water Milfoil Plants, \$5.00 per Bushel.  
\$4.00 per bu. in 10 bu. lots.

Widgeon Grass Plants, \$10.00 per bu.  
\$8.00 per bu. in 10 bu. lots.  
Less special discount.

Wisconsin Aquatic Nurseries

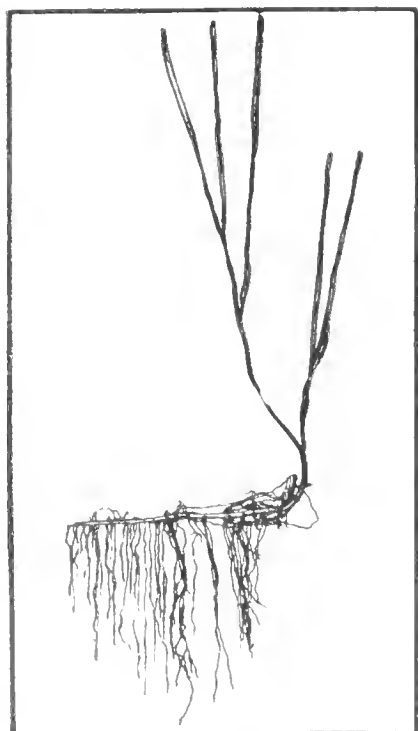
Oshkosh, Wis.

Dear Sirs:

Enclosed please find check for Wild Rice Seed. I want to thank you for your promptness in getting your orders out and for the extra seeds and plants that you sent with my order of the 17th of April. Your firm surely lives up to their guarantee about making good any order that is not satisfactory and in the future I can't speak too highly of your fair and square dealings.

Yours very truly,

Signed: W. F. STEINBECK,  
1963 N. 5th St.,  
Kansas City, Kansas



Eel Grass



Muskgrass

## Eel Grass

### SALT WATER

The Eel Grass is the only important Wild Duck food plant which we supply that will grow in waters which are salty. All kinds of Wild Ducks will feed upon the seeds and foliage.

### WHEN, WHERE AND HOW TO PLANT

Plants of the Eel Grass are transplanted during June in quiet, shallow, salt waters covered at low tide. In transplanting these simply set them out in shallow waters during low tide by making a hole in the soil and placing the roots in it; then replace the soil pressing it firmly about the plant.

Price \$15 per bushel.

## Muskgrass

A few bushels of Muskgrass planted during late summer or fall will produce an excellent feeding place for the Wild Ducks the following season. They feed upon the foliage as well as the many small tubers which are produced. Both Marsh Ducks and Diving Ducks feed upon Muskgrass. One will also increase the sport with rod and reel, for Muskgrass is a valuable food and cover plant for fish.

Broadcast bits of the plants containing (oogonia) seed spores upon the waters anytime from June to December. Muskgrass grows in fresh or alkaline waters from 2 to 12 feet in depth on almost any kind of bottom. One requirement is that the waters contain some lime which will be indicated by shells or shell bearing creatures such as snails or clams in the waters. Four Bushels will plant an Acre.

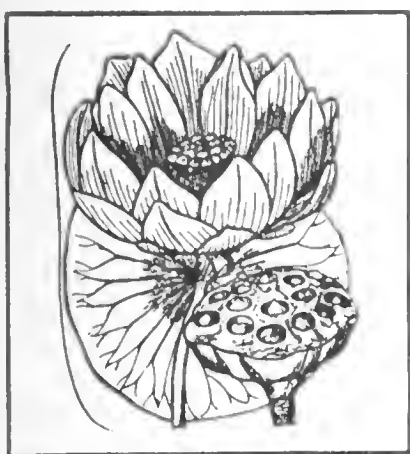
Muskgrass Seed Spores \$4.00 per bu.

Less special discount.

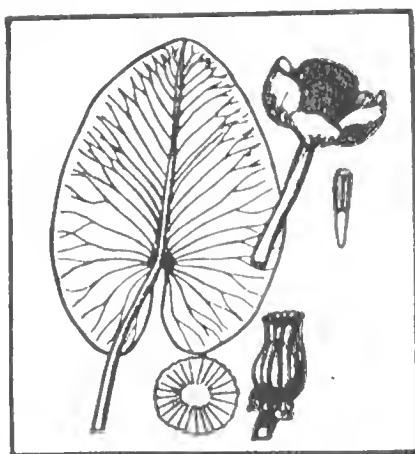




## OSHKOSH, WISCONSIN



Lotus Waterlily



Spatterdock

## WATERLILIES

### SPATTERDOCK

Also known as Yellow Waterlily make a fine Wild Duck attraction when planted in addition to other natural foods. Marsh Ducks feed upon the seeds in early fall.

Spatterdock is considered an excellent winter food for the Muskrat as it grows in waters at a depth beyond the freezing point.

### WHITE WATERLILY

An excellent food and cover plant for fish. White Waterlilies are very ornamental and will add to the beauty of your waters.

### AMERICAN LOTUS

Has some value as a food and cover plant for fish and is also of some value as a wild waterfowl food. American Lotus is very ornamental having large cream colored flowers.

### WHEN AND WHERE TO PLANT

Tubers or rootstocks of Spatterdock and White Waterlilies are planted from spring to fall. Seed of the American Lotus may be planted at any time. All waterlilies do best on a mud bottom in waters from 1 to 4 feet in depth.

### HOW TO PLANT

Tubers and rootstocks are very easily planted. Cut a fairly straight stick about 5 feet in length which is between 1 and 2 inches in thickness. Whittle off one side at end to make a flat surface, then drive two nails into this flat surface on a slant to make a sort of crotch. Place a tuber into this crotch and push it into the mud about 3 or 4 inches. Plant these about 3 feet apart. These tubers are usually planted from a boat.

Seven hundred fifty tubers will plant one acre.

American Lotus seed is simply broadcast using 10 lbs. to plant an acre

### PRICES

White Waterlily Tubers \$8.00 per 100

Spatterdock Roots \$12 per 100

American Lotus Waterlily Seed \$1 per pound.

---

There are but three fundamentals that concern wildlife of every kind, they are: To Find Food, Protection From Enemies and To Reproduce. Make your place attractive and you will enjoy plenty of game and lots of sport.



## Deep Water Duck Potato

(*Sagittaria Rigida*)

Another favorite food for all kinds of Wild Ducks. The diving ducks feed on it during fall in the deeper waters. Shoal water ducks eat it if the waters are low during fall. It is a rapid grower and produces abundantly of food. It has numerous acorn like tubers on its roots just beneath the bottom soils which the Wild Ducks glut themselves with. One can hardly drive the ducks away from a good bed of Deep Water Duck Potatoes and if they do leave it is only temporary, they soon return for more.

Plant the tubers during spring or summer in from one to five feet of water. A soft mud bottom is best and will produce a luxuriant growth next year. They are very hardy and will thrive in any fresh water lake, pond or stream. Changing water levels do not affect the growth of these Duck Potato plants.

In planting deep water duck potatoes just fasten the tuber to an eight penny nail with a small rubber band and drop them in the waters in the desired place. One thousand tubers plants one acre.

Deep Water Duck Potato tubers	\$15.00 per 1000
“ “ “ “ “	2.00 per 100

Less Special Discount

## Water Cress

The Water Cress is used largely by breeders of Wild Ducks, who consider it very valuable as a food plant for their Duck Farms. It grows very rapidly.

### WHEN, WHERE AND HOW TO PLANT

Water Cress may be started either by planting seed or transplanting plants from April to July. It grows in cool waters, usually where there is a slight current, like in springs, brooks, small streams or shallow ponds. In transplanting plants simply set them out by hand in shallow waters 1 foot or less in depth. Seed is best planted by mixing it with mud and dropping bits of the mixture here and there in the waters. Three pounds of seed for one acre.

Water Cress Seed \$7.50 per pound.

---

## Sweet Flag—Water Iris

Both the Sweet Flag and Water Iris are important food and cover plants for Muskrats. They are also important cover for waterfowl and provide excellent nesting places. Roots may be planted during spring in wet low lands or marshy places.

1000 Roots \$30.00; 100 Roots \$4.00



## Brownleaf Pondweed

(Potamogeton Natans)

Diving Ducks eat the brittle roots of this important Wild Duck Food. Shallow water Ducks feed on its wheat-like seeds at the waters surface. It is very hardy, grows in from one to six feet of water on either soft or firm bottom. Easily planted by mixing the seed with clay and broadcasting. Plant during spring months, it remains dormant a short time and the following year produces a growth.

Brownleaf Pondweed is also valuable as a food and cover plant for game fish. Such as Blue Gills, Perch and Crappie always linger in the Brownleaf beds.

Ten pounds plants one acre.

### Price

Brown Pondweed Seed \$1.50 Per Pound.  
Less Special Discount.

## Naias—Bushy Pondweed

The Naias or Bushy Pondweed is an important wild duck food, all parts of the plant are eaten by them. It grows in waters ranging in depth from 1 foot to 6 feet, on either sand, clay or mud bottom. Naias is a strictly fresh water plant. It grows entirely submerged, seldom ever exceeding one foot in height and makes a sort of soft green carpet of moss over the bottom.

This plant is considered very important as a food, cover and oxygenating plant for game fish. It also helps clarify the waters.

Plants containing seed should be planted during August to October. They are easily planted by mixing them with clay and broadcasting into the water. Four bushel plants an acre.

### Price

Naias with seeds \$7.00 per bu.  
Less special discount.

## Water Shield

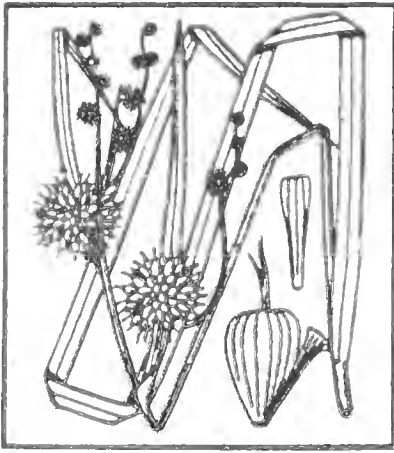
Sometimes called Cabomba or Brasenia is an important wild duck food. Only during the last few years have we been able to grow sufficient quantities to supply the demand and thus list it in our literature. Wild Ducks like the tender shoots and hibernating buds of the Water Shield as well as its seeds. It has a very strong root system almost indestructible by carp. Water Shield grows from the far north to the extreme south. It grows best in waters from one foot to five feet in depth on a mud bottom. Fresh waters, lakes or ponds are most suitable for its growth.

Water Shield has small round leaves, like pond lilies (about 2 inches across) and make wonderful cover for game fish. Roots are planted from February through June. One thousand Roots will plant an acre.

### Price

Water Shield Roots \$ 5.00 per 100  
" " " 38.00 per 1000

Complete planting instructions sent with each order.



Burreed



Reedgrass

## COVER PLANTS

### BURREED

Is a valuable plant to have growing in your marsh. Seeds which resemble kernels of corn, shell from the large prickly burr during fall and are eagerly eaten by Marsh Ducks.

Burreed grows from 3 to 5 feet in height and during early summer makes ideal nesting places for the Wild Ducks, also provides blinds for the hunter during fall.

### CATTAILS

These plants grow to be 5 to 7 feet high and make good blinds. Cattail plants rank very high as a food, also cover plant for the Muskrats.

### REEDGRASS

Makes the very best blinds for hunters. It grows from 5 to 8 feet with numerous long, narrow leaves. During late fall in the North, Wild Ducks will seek shelter from the cold winds among the Reedgrass. It is also of importance for the Muskrat.

### BULRUSH

The Bulrush will grow in waters having very sandy bottoms where other vegetation cannot be grown. It provides excellent blinds for the hunter and good shelter for the Ducks.

### WHEN AND WHERE TO PLANT

The Burreed, Cattail and Reedgrass grow best on a fairly rich soil either on wet lowlands or in waters from 1 to 18 inches in depth. Bulrush will grow on any kind of bottom except stone, in waters from 1 inch to 3 feet in depth. The roots of these plants should be transplanted during May and June.

### HOW TO PLANT

Slip on your boots, take a spade or digging shovel and a quantity of roots to the place you are going to plant. In the shallow waters about three feet apart, take up a shovel full of soil and place 1 root in each hole, then replace the soil and press it firmly into place with your boot. One Thousand Roots will plant one Acre.

### PRICE

\$4.00 per 100 Roots; \$30.00 per 1000 Roots

BURREED SEED \$0.75 PER POUND.

Less special discount.

## For Wild Ducks, Quail or Grouse

### DUCK WHEAT

Or Goose Buckwheat is a very rapid growing plant. It produces an abundance of seed which Wild Ducks and Geese are fond of. Most favorable results are obtained when seed is planted in June or July on places which go dry or can be drained during summer and flooded during the duck season.

### MILO MAIZE

This plant is used in the same manner as Duck Wheat and is planted about the same time under similar conditions. Both Quail and Grouse are very fond of the Wild Buckwheat and Milo Maize, plant a little space here and there in the waste places.

### HOW TO PLANT

Break the soil, with a plow, disc or drag, then broadcast the seed using about 50 pounds to the acre and drag or rake the planted area to cover seed.

Price \$15 per 100 pounds.



Chufa

## Chufa, Nutgrass

A very good all around duck food for places which are very dry in summer and flood during the duck season. Chufa does particularly well in the South and may be planted anytime from March to July. One bushel of the nut-like tubers will plant an acre. In planting break the soil, then broadcast the tubers and rake or drag planted area to cover tubers.

Chufa Tubers \$13 per bu.

—45 lbs.

Less special discount.

Montgomery, Alabama, Dec. 1, 1927.

Wisconsin Aquatic Nurseries

Oshkosh, Wisconsin

Dear Sir:

Atten.: Mr. Coon:

Your letter has just reached me. Would have been glad to meet you while in Montgomery. Would have been delighted to have had you inspect our lake. The greatest trouble with planting anything in this lake is the various growth. The soil is very rich, grows all kinds of moss and other water plants. The moss is the great trouble, it is so dense it is hard to get any kind of seed down to the soil. However our WILD RICE grew fine, our SPATTERDOCK and LOTUS WATER LILY are well set, made a fine crop this year.

To show what NATURAL FOOD will do, we have ten Wild Ducks now to every one last year. If we can just get some other plants well set, we will have the greatest duck lake in the country.

We have so many ducks now I believe they would destroy the tubers if we were to plant more. I know they would get most of them. How about spring planting? How late can Muskgrass and Sago Pond Weed be planted successfully? Will give you an order for some of both at the right time.

Very truly yours,

JFY:S

(Signed) J. F. YARBROUGH.



# WISCONSIN AQUATIC NURSERIES,

## TREES, SHRUBS & VINES

IMPORTANT FOR UPLAND GAME BIRDS  
AND ANIMALS



### TREES

Pin Cherry (4-8 feet high)	-----	\$2.00	each
Hackberry (1-1½ inch base)	--	6.00	"
Hawthorn (3-5 feet high)	-----	2.80	"
Wild Crab (3-4 feet high)	-----	2.00	"
Mulberry (2-3 feet high)	-----	2.20	"
English Oak (6-8 feet high)	---	8.00	"
Pussy Willow (4-5 feet high)	--	1.20	"
Red Cedar (2-3 feet high)	-----	8.00	"
Scotch Pine (2-3 feet high)	-----	4.00	"
Douglas Fir (2-3 feet high)	-----	3.00	"
Beech Nut (2-3 feet high)	-----	5.00	"

### SHRUBS

Hazelnut (18-24 inches)	-----	1.00	"
Honeysuckle (3-4 feet)	-----	1.20	"
Chokecherry (3-4 feet)	-----	1.60	"
Smooth Sumac (3-4 feet)	-----	1.00	"
Mountain Currant (18-24 inches)	-----	1.10	"
Wild Rose (18-24 inches)	-----	1.50	"
Swamp Rose (2-3 feet)	-----	1.30	"
American Elder (3-4 feet)	-----	1.40	"
Buffalo Berry (2-3 feet)	-----	1.20	"
Snow Berry (2-3 feet)	-----	1.00	"
Nanny Berry (3-4 feet)	-----	1.60	"

### VINES

Bittersweet (2 years)	-----	1.00	"
Wild Grape (2 years)	-----	1.00	"
Raspberry Plants	-----	2.50	doz.

NOTE—Trees, Shrubs and Vines listed above are important as food producers and cover plants for Upland Game Birds and Animals. Prices are F. O. B. Nurseries. No orders accepted for any quantity or assortment amounting to less than \$10.00.

### Ringneck Pheasants

This popular species of pheasant likes the open fields adjoining that low marshy area best. They like to be near water in a thick weed growth where food is plentiful. About the open grain fields which are bordered by low growing shrubs that make fine cover, a place to hide in safety. Leave a border of shrubs and weeds along that fence line.

### Quail

These little old game birds are the pride of any sportsman's bag. They like the open field with clumps of shelter in the form of low shrubs covered with vines. Twice daily these game birds like to go to the nearby pond, stream or water hole and like to linger and feed on the weed-seeds and berries that grow nearby.

### Natural Foods

Following are listed several of the important field seeds that provide food for both quail and pheasant. Prices given are f. o. b. point of shipment and subject to the same discount as allowed on aquatic planting materials.

### PRICES

	Per 100 lbs.	10 lbs.
Lespedeza Clover Seed	----- \$20.00	\$3.00
Wild Poppy Seed	----- 35.00	4.00
Canary Seed	----- 21.00	3.00
Wild Millet Seed	----- 15.00	2.00
Bird Thistle Seed	----- 35.00	4.00
Large Dwarf Rape Seed	----- 21.00	3.00
Smartweed Seed	----- 15.00	2.00
Sunflower Seed	----- 15.00	2.00
Whole Flax Seed	----- 20.00	3.00
Hairy Vetch Seed	----- 24.00	3.50
Dwarf Milo Maize Seed	----- 15.00	2.00
Wild Buckwheat Seed	----- 15.00	2.00

## OSHKOSH, WISCONSIN

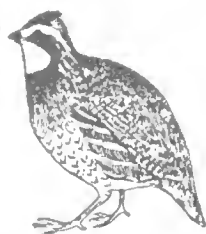
### WHAT CONSTITUTES A GOOD GAME REFUGE



It is a common error that national, state and municipal forests are per se good game refuges. President John B. Burnham of the American Game Protective Association points out, that this is not necessarily true. In order to serve any good purpose as game refuges forests must be attractive to wild animal and bird life. They must contain food as well as shelter.

The tendency in management of public forests is to plant and promote the growth only of such trees as will in time make merchantable timber, with no thought of such other free growth, shrubbery and other plant life as is necessary to an attractive home for birds and animals.

Game cannot live without food. "The reason," says Mr. Burnham, "why many game refuges are absolutely worthless (aside from the question of vermin control) is that, to put it figuratively, they provide only a safe house, with no kitchen and no order in the grocery store. You cannot expect wild animals and birds to flock to foodless refuges just because they are planted with commercially attractive trees. Of the conifers, hemlock, white cedar and balsam, when small, furnish food for deer and hares in the Winter season. Pine has practically no food value and spruce none whatever. In summer even deer and rabbits will find nothing they can eat in a typically planted forest."



Mr. Burnham points out that for every coniferous tree planted there should be a number of deciduous trees—including fruit and nut-bearing trees. Game wants sunlight, too, and plenty of it. So openings and gaps in the forest must be left which will encourage undergrowth. At least half of the forest area should be left unoccupied by commercial trees if it is to be a good game refuge.

Quoting again from Mr. Burnham: "We should let Mother Nature have something to say as to what happens on this 50 per cent of so-called wasteland. There is nothing more valuable for our primary object than weeds and berry briars, sumachs, wild apples and grapes, barberries and thorn apples, and where Nature leaves the ground bare give her the benefit of the doubt and believe that she may know something after all. Partridges need places to dust and wild grasses and plants are important in the game's dietary. Some refuges should have no forest at all. We must not forget the wild grass swamps for pheasants.

## Information for the Muskrat Farmer



Man has been engaged in the trapping of fur-bearing animals since the early ages. The women of the stone age wore furs as clothing, the modern women wear furs, not alone because of the warmth, but for the beauty and their personal adornment. Trappers, spurred by high prices, have ruthlessly depleted the wild supply. The drainage and reclamation of swamp lands have destroyed the breeding grounds of millions of muskrats. So, if we are to have a dependable supply of fur, they must be raised. Statistics compiled by Frank G. Ashbrock of the U. S. Biological Survey, show that the muskrat is the most important of all fur bearers. More than fifty per cent of all fur used today is muskrat. His glossy pelt is not only used in its natural state, but when dyed is sold as Hudson seal, river mink, southern beaver, neutria, otter, sable and many other popular furs. For the past few years the demand for muskrat pelts has exceeded the supply by from fifteen to twenty million pelts. The result of this demand has prompted the commercial raising of this little fur bearer, by some of our largest manufacturing furriers and far-sighted individuals. Muskrat farming is a business, the same as banking, manufacturing or mining. It is as practical as the raising of sheep, cattle or hogs, the difference being that it is ten times as profitable.

To successfully raise muskrats one must have a spring-fed marshy swamp with an outlet which can be dammed, so that a uniform water level may be maintained. The depth of the water and musk, or floating bog, must be sufficient so that it will not freeze to the bottom in the most severe Winter, the result of which would be cutting off of the food supply and the starvation of the animals, unless artificially fed. The swamp lands must abound in the natural foods of the muskrat, such as cat-tails, bulrushes, duck millet, three-blade grass, wild rice, wapato and wild celery. The location must also have high, dry ground surrounding the swamp on which fences are built. Proper fencing is of importance. A crop of root vegetables, such as carrots, parsnips and sugar beets, should be planted, stored in root cellars and fed during the Winter months, by using feeding houses. On ranches where the muskrats are in the habit of using the feeding houses, the rancher has the opportunity of scientifically feeding during the breeding season, which results in a larger number of young litters. Another decided advantage of feeding houses is the ability to easily catch the animals. Trap doors are over the entrances; by closing them when one wishes to make a catch the muskrat cannot escape. This enables the rancher to market only prime pelts, which command the highest prices.

# OSHKOSH, WISCONSIN

If a muskrat farm is ideally located, properly fenced and well planted with natural foods, it is bound to be a money-maker. It is a never-failing crop, unaffected by hot, cold, wet or dry weather.

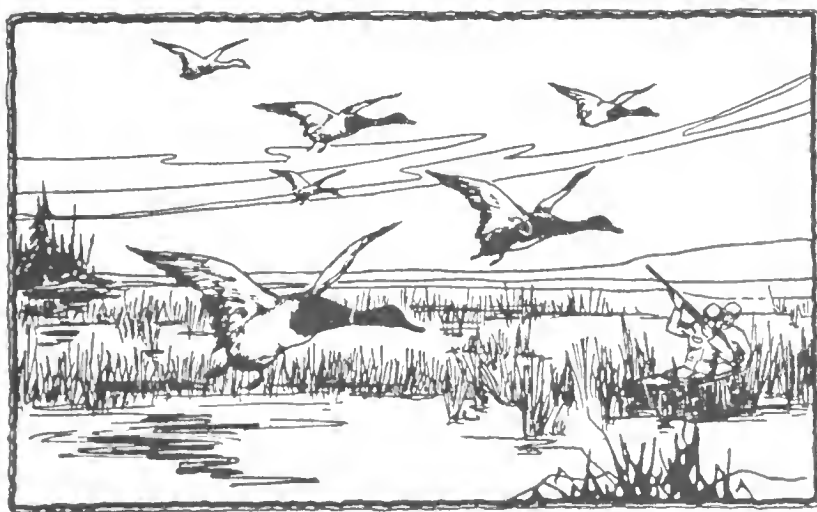
Musk rats are hardy and immune from diseases. They multiply rapidly, being the most prolific of fur bearers. From actual observation one female produced thirty-three young in one breeding season. An interesting experiment has recently been concluded in Manitoba. A pair of muskrats were put into a pen and in nine months they and their progeny increased to the astounding total of 138.

It has conclusively been proved that the young female born in the Spring will produce the same Fall. We have had increases of a second litter in the Fall from a female born in the Spring; this, however, is unusual. The next Spring she has the average litter, which is eight or ten young.

## NATURAL MUSKRAT FOODS

Listed here are the aquatic plants important as Muskrat Foods, all of which are listed with prices and description of growth and water conditions required, in this booklet.

	Page		Page
Wild Rice -----	4	Deep Water Duck Potato -	16
Wild Celery -----	6	Sweet Flag -----	16
Sago Pondweed -----	8	Water Iris -----	16
Wapato Duck Potato ----	9	Burreed -----	18
Spatterdock -----	15	Cattails -----	18
White Waterlily -----	15	Reed Grass -----	18
American Lotus -----	15	Bulrush -----	18



THE FIRST NATIONAL BANK,  
Huntsville, Texas, Feb. 15, 1928.

Wisconsin Aquatic Nurseries  
Oshkosh, Wis.

Two years ago we bought some Wild Rice Seed from you for our lake. It grew fine and we had a very nice stand. However, a few months later, a water spout broke our poorly constructed dam and we lost it. We now have it in good shape for standing severe strain and have concluded to plant some more Rice.

Kindly send me 25 pounds Wild Rice Seed for planting in our lake.

Signed: Yours truly,

G. A. WYNNE, Vice-Pres.

Oct. 7, 1927.

Wis. Aquatic Nurseries,  
Oshkosh, Wis.

Dear Sirs:

The Wild Rice Seed I got from your Company last fall is doing fine. I will send you another order a little later, as soon as I have made the necessary arrangements.

Yours truly,

W. C. WALLACE,  
Errol, N. H.

# WISCONSIN AQUATIC NURSERIES,

## IMPORTANCE OF AQUATIC VEGETATION FOR GAME FISH

Many of the same plants which are important food plants for waterfowl are also important food and cover plants for game fish. Therefore, one will improve both hunting and fishing by establishing a growth of aquatic vegetation in that lake, pond or stream.

Plant life takes a very important part in the purification of waters by taking up the poisonous carbon dioxide gases given off by soil decomposition which asphyxiate fish life, and sending forth in its place the oxygen into the waters which is so essential to fish life. These plants also support countless numbers of minute animal life upon which the young fry are dependent for their feed. They also provide excellent shelter and hiding places for the younger fish to hide and escape the larger ones which are of a cannibalistic nature, feeding upon their smaller kin.

Food, protection and better living conditions for the small fish mean that many more grow to maturity, thus more fish, larger fish, healthier fish and better fishing.

Aquatic vegetation also assists in the clarification of the waters. It binds the soils and prevents turbid water, also collects the floating particles of sediment. It shades the under waters keeping them cool which is very helpful and healthful to the fish life; also provides better spawning beds.

In order that there be a plentiful supply of fish in any waters it is first necessary to protect the small fry. They cannot feed upon the larger insect life or upon one another as the larger fish do and as a result in waters barren of aquatic vegetation millions of the small fish perish unbeknown to you.

*"There!  
Right by  
that lily  
pad,"*



*-ZOWIE!-  
"What a  
Whopper!"  
"That's  
where they  
lay!"*

Wisconsin Aquatic Nurseries  
Oshkosh, Wis.

June 23, 1930.

Gentlemen: Just received last order today, ordered by Mr. Walker. It arrived in good shape. The stuff I got before is coming along very nicely.

Signed: Yours very truly,  
PERCY D. GASKILL, D.D.S.  
Lancaster Inn, Lancaster, Calif.



# OSHKOSH, WISCONSIN

## SUNLIGHT FOUND HARMFUL TO FISH AND FISH EGGS

—Courtesy Alabama Sportsman.

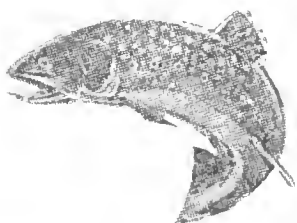
As a result of experiments at its Holden, Va., hatchery, the Bureau of Fisheries, Department of Commerce, has found that exposure to sunlight is detrimental to eggs, fry and fingerlings.

The experiments, it was stated orally on November 4, were designed to determine whether the remarkable curative results ascribed to ultra-violet rays and sunlight were actual. The bureau found that the doubts of fish culturists on this score were well founded, continuous exposure to direct sunlight being found as not only of no benefit but definitely harmful to eggs and young fish.

## PLANTS IMPORTANT TO GAME FISH

In the pages of this booklet as indicated here will be found description of the following species of plants that are important to game fish. What, when, where and how to plant them, also prices are given after the description of each plant. Here are those plants important to game fish.

	Page		Page
Wild Celery .....	6	Sago Pondweed .....	8
Coontail Plants .....	12	Elodea Plants .....	12
Water Milfoil .....	13	Muskgrass .....	14
Spatterdock .....	15	White Waterlily .....	15
Deep Water Duck Potato ..	16	Brownleaf Pondweed .....	17
Naias-Bush Pondweed .....	17	Water Shield .....	17
Bulrush Plants .....	18		



## TESTIMONIAL LETTER

Wisconsin Aquatic Nurseries

Box 331, Oshkosh, Wis.

Gentlemen:

On behalf of the members of the Lake Nokomis Fish and Game Club I want to thank you for the wonderful assortment of plants which you shipped us. They certainly were the best ever. I am positive no one has ever received any better. While the assortment was not large I am in hopes that the results from these plants will be the very best. Certainly it will not be the plants fault if we do not get the results we expect to.

Again thanking you for past favors and for the wonderful spirit of cooperation you have shown in this matter, I am

(Signed) Lake Nokomis Fish & Game Club,  
By Bert Harding, Secy.,  
318½ 3rd St.,  
Wausau, Wisconsin.

Canada Guides Limited  
606-607 Shaughnessy Bldg.,  
Montreal, Que., Canada

January 28, 1933.

Wisconsin Aquatic Nurseries

Oshkosh, Wis.

Gentlemen:

Enclosed please find my order for materials amounting to \$50.00. I forgot to mention in my last letter, but would like to say now, that the seed which we got from you in the Fall of 1931 and planted on our Hog Island property did very well indeed. We had a small fresh water creek in which we planted the wild rice and we were both surprised and pleased at the remarkable results obtained. All the other seeds did excellently.

Thanking you for past favors and trusting to receive copy of order with planting instructions, I am

Sincerely yours,

Signed: ROBERT McCOMBE.

## **Have You Heard of the Buffalo, the Pigeon and Last the Heath Hen**

Years ago great numbers of Buffalo used to roam the western prairie; yes, thousands of them. They were a wild ox (American bison), commonly known as buffalo. Today they are gone, civilization has crowded them out. A few remain in the various zoos.

Not many years ago the Passenger Pigeon was here in countless numbers. Wonderfully prolific, having the forest of the north as its breeding ground, traveling hundreds of miles in search of food, it was here today and elsewhere tomorrow. Today they are gone; the last Passenger Pigeon died in 1914 in the Cincinnati zoo.

Now the Heath Hen, their numbers have also dwindled away. In 1916 there were estimated about 2000 Heath Hens, in 1928 there remained about three. Today they are also gone.

### **WILL THE WILD DUCK GO?**

What is happening to our supply of Migratory Waterfowl? Officials have taken drastic measures to save our Wild Duck and other Game. Drainage, drought and other causes have reduced the shallow water area, taking away their feeding and breeding grounds.

Lately on the few remaining attractive places which abound in natural foods larger numbers of Wild Ducks congregated than for many years.

Do your bit toward conservation of the Wild Duck, help to prolong this great outdoor sport. Plant that pond, river or bay with natural aquatic food plants, increase the range of the waterfowl and you will be helping to increase their numbers and at the same time insure some real sport for yourself and sportsmen associates.

### **WILD DUCKS MUST EAT**

Did the wild ducks and geese darken the sky over your local waters or at the preserve last fall? If not, there is some reason, undoubtedly the very reason is that there is not enough natural food growing there to attract them.

Wild ducks cannot live upon waters without food and therefore migrate on to the places where they find plenty of the kinds of food they like. In waters where their natural food does not grow now, it can very easily be planted and the waters made attractive to the wild waterfowl.

There are undoubtedly several food plants adapted to your water conditions and it will be advantageous to have a variety growing in your waters. Different kinds of waterfowl are fond of different kinds of food. Different plants produce food in various forms at different times throughout the season. Therefore, a variety of foods attract a larger number of ducks and holds them for a longer interval.

OSHKOSH, WISCONSIN

## Order Blank

### WISCONSIN AQUATIC NURSERIES

P. O. Box 331

Oshkosh, Wisconsin, U. S. A.

Date-----, 1939

Ship to -----

Address -----

Express----- Parcel Post-----

Please Ship on -----

Date

Quantity	Material	Price
	Lb. Giant Wild Rice Seed	
	Wild Celery Tubers	
	Sago Pondweed Tubers	
	Wampee Plants or Seeds	
	Wapato Duck Potato Tubers	
	Lb. Wild Duck Millet Seed	
	Lb. Smartweed Seed	
	Bushels Ducksmeat Plants	
	Bu. Coontail Plants	
	Bu. Elodea Plants	
	Bu. Water Milfoil Plants	
	Bu. Muskgrass Seed Spores	
	Lb. Brownleaf Seed	
	Spatterdock Plants	
	White Waterlily Roots	
	Lb. American Lotus Seed	
	Lb. Burreed Seed	
	Deep Water Duck Potato Tbrs.	
	Bu. Naias with Seed	
	Water Shield Plants	
	Total	
	Less 30% Discount	
	Amount of Order	\$

Inclose Check \$----- Express C.O.D.-----

Order By -----

Sign Name Here

Address -----

# WISCONSIN AQUATIC NURSERIES,

---

## TERMS

Prices listed herein effective January 1st, 1939, this list cancels all previous lists and quotations. These prices are F. O. B. Oshkosh, or other shipping points unless otherwise stated and subject to change without notice.

30% discount off prices listed on all orders placed before May first. 2% additional discount if payment accompanies order.

We urge you to order early and be sure of your supply. Cash or satisfactory reference with order, if purchaser has no credit established with us. Shipments will be sent C. O. D. if so desired.

Accounts not paid when due are subject to sight draft also interest charged at the rate of 8% per cent per annum.

These aquatic seeds and other planting materials are perishable and must reach their destination in the shortest possible time and should be shipped by express. If you wish shipment by Parcel Post or Prepaid Express please send sufficient money to cover same otherwise we will ship charges collect.

Freight shipments can be made on dry seeds, shrubs and trees as listed. Wild Duck Millet, Smartweed, Chufa, Duck Wheat, Milo Maize and all items listed on page 20 for upland game birds.

For our reference write New American Bank, Oshkosh, Wis.; Department of Conservation, Harrisburg, Pa.; American Fisheries Society, Washington, D. C.; American Wildlife Institute, Washington, D. C.; I. T. Quinn, Commissioner of Conservation, Montgomery, Ala.; Kenneth N. Kunkel, Commissioner of Conservation, Indianapolis, Ind.; any outdoor sportsmen's magazine such as Field and Stream, Outdoor Life, Sports Afield, etc.

## GUARANTEE

We guarantee our seeds, roots, tubers and other nursery stock to grow and produce satisfactory results. If a complete planting or any portion fails to produce what you consider a satisfactory growth after allowing a sufficient time to grow and mature, we will agree to furnish an equal quantity to that which fails at one-half the list price.

You are the judge as to whether or not your planting has proven a success. If dissatisfied with the results, tell us about it and we will replace the order at half-price, or an equal value of any other planting materials you wish to select from our list at one-half list price.

Failures with good germinating seed and hardy plants, tubers, shrubs, etc., such as we supply are few and far between. Marsh and water plants are very hardy and sure to grow.

*Complete Planting Instructions Sent with Each Order.*

WISCONSIN AQUATIC NURSERIES

(Box 331)

OSHKOSH, WIS., U. S. A.



P. O. Box 331

# We're Going to Let This Literature Tell the Story

This letter is going to be short

If you are interested in improving your Hunting and Fishing, send in the attached order blank listing the materials you wish, and we'll do the rest.

# WISCONSIN AQUATIC NURSERIES

**SPECIALIST IN THE DEVELOPMENT OF BETTER HUNTING AND FISHING GROUNDS.**

# NATURAL FOODS ATTRACT WILD DUCKS

[ALSO IMPROVE THE FISHING]



You can have More Wild Ducks and Better Hunting by planting their Natural Foods now. A Hundred Wild Ducks will stop on those waters to every ten that come there now, after providing plenty of their favorite foods.

These natural foods not only attract more Wild Ducks, but will hold them over a longer period of time, throughout the hunting season. Once a growth is established it will be permanent, they reseed from year to year, the first cost is the only cost.

Plant now, Nature's Planting Season. Fall is the time nature has provided for the sowing of these seeds as they grow in their natural state. They will bury in the mud, lie dormant over winter, start growth in early spring. Next fall you will have an attractive place for Wild Ducks to stop. A liberal planting insures good and quick results.

These plants are also important to Game Fish. They support small animal life that is food for the fish, provide cover and protection, clarify, purify and oxygenate the waters. In all it means more fish, larger fish and more sport.

Below and on the following pages are the best Wild Duck Coaxers, mail you order at once, use attached order blank and save.

20% DISCOUNT OFF THESE PRICES ON ORDERS PLACED THIS MONTH.

## Wild Rice

Mallards, Pintails, Blackducks, Teal, Widgeon and Canada Geese fly hundreds of miles to the Wild Rice Marshes. During Fall they find the ripened grains in great abundance, also shelter and hiding places among the tall growth. In the north only the freezing water will drive them out. In the south they will stay on these good feeding grounds throughout the entire winter.

A field of Wild Rice once established makes a permanent feeding ground, for wild rice reseeds itself from year to year.

Best places for planting wild rice are in sloughs, marshy lakes or ponds. In bays or coves on larger lakes, streams or rivers where it will be protected from waves. Wild rice does the best in fresh waters from 6 inches to 3 feet deep where there is a mud bottom.



Fifty pounds of seed plants  
one acre.

—Price \$0.25 per Pound—

## Wild Celery

Canvasbacks, Redheads, Bluebills, Mallards and Blacks darken the sky over the wild celery beds. Wild celery is fully as important as wild rice as a duck food. They migrate thousands of miles to find wild celery and feast upon the tender white shoots and buds.

Wild Celery is an important food and cover plant for fish, supporting abundance of animal life which small fish feed upon, also providing hiding places where they may escape the larger fish.

The Wild Celery is a hardy submerged plant which will grow in almost any fresh waters from 2 to 12 feet in depth. It grows well in slow running streams, lakes or ponds which are not land locked. Extreme floods do not affect the growth of this plant.

Seed of the wild celery should be planted during early Fall. Fifty pounds will plant an acre.

—Price \$0.30 per Pound—





## Wampee

### A GOOD DUCK COAXER

Sometimes called duck corn and is an excellent marsh duck food. The seeds shell off the stalk in late Fall and will help hold the Mallards and other marsh ducks after many other foods are gone.

Wampee seed may be planted this Fall in waters from 1 inch to 1 foot in depth. Ten pounds will plant an acre.

—Price \$0.50 per Pound—

## Sago Pondweed

### GOOD ALL AROUND DUCK FOOD

Early in the season Pondweeds bring Mallards and Teal, later the Canvasbacks and other divers. In fact, all kinds of wild ducks feed upon the Pondweeds. These plants furnish a very large percentage of food for wild ducks, producing more food than any other family of plants. They are hardy and will grow under almost any water conditions.

The most important food plant of the Pondweed family is the Sago Pondweed, a submerged plant and perennial. When once established in your waters insures a permanent feeding ground. Wild ducks feed on all parts of the Sago including the small white tubers and tender roots which are produced in abundance.

Pondweeds are very highly recommended as food and cover plants for bass, trout and other game fish. The foliage supports a very large amount of insect life as well as providing excellent cover.

Seed of these plants should be planted now in waters from 2 to 8 feet in depth on almost any bottom, either fresh, stagnant, alkali or brackish waters.

Forty pounds will plant an acre.

—Plants with Seed \$0.50 per Pound—

More Duck Food on Other Side This Circular.

—20% Discount Off These Prices—

OSHKOSH, WISCONSIN, U. S. A.]

## Burreed

A food plant for marsh ducks. The seeds shell off the large prickly burr like kernels of corn and are eagerly eaten by mallards and other shoal water ducks; it also provides wonderful nesting places for these waterfowl, and makes excellent blinds for the hunter. Burreed grows on damp lowlands or in shallow waters from 1 inch to 1 foot in depth. Ten pounds will plant an acre.

Price \$0.50 per pound (2 quarts—1 lb.)

## Muskgrass

### RAPID GROWING DUCK FOOD

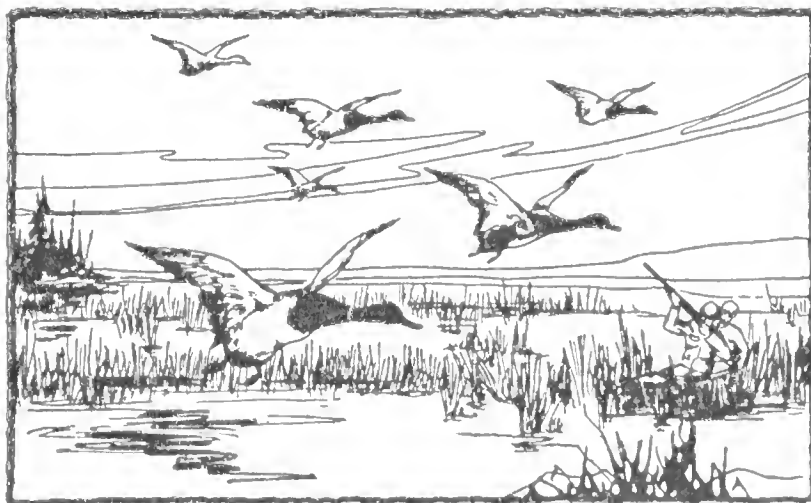
Widgeon, Gadwalls, Green and Blue Wing Teal, Bufflehead, Ruddy Duck, Mallards, and Bluebills like Muskgrass.

A few bushels of muskgrass (chara) planted this Fall will produce a few acres of food for the ducks next Fall. Ducks feed upon the foliage as well as the little tubers which are produced in abundance.

This plant is also a valuable food and cover plant for fish.

Plants with seed spores can be planted now in either fresh or alkali waters from 2 to 12 feet in depth on almost any bottom. Four bushels will plant an acre.

Muskgrass with seed spores \$2.50 a bushel.



# ORDER BLANK

## WISCONSIN AQUATIC NURSERIES

P. O. BOX 331

OSHKOSH, WISCONSIN

Please ship the following Duck Foods:

Ship to .....

Address .....

.....

Please ship on .....1938

Express..... Parcel Post.....

Quantity	Material	Price
	Lb. Giant Wild Rice Seed	
	Lb. Wild Celery Seed	
	Lb. Sago Pondweed Seed	
	Lb. Wampee Seed	
	Lb. Burreed Seed	
	Lb. Spatterdock Seed	
	Lb. Lotus Seed	
	Lb. Brownleaf Pondweed Seed	
	Bushels Muskgrass Seed Spores	
	Tubers Wapato Duck Potato	
	Tubers Deep Water Duck Potato	
	Tubers White Waterlily	
	Total	
	Less 20% Discount	
	Amount of Order	

Inclose Paym't \$..... Express C.O.D. \$.....

Order by .....

Sign name here

Address .....

TEAR OFF HERE



## —TERMS—

Prices listed herein effective July 1st, 1938. These prices are F. O. B. Oshkosh or other shipping points unless otherwise stated and subject to change.

20% discount off prices listed on all orders placed now.

Cash with order, if purchaser has no credit established with us. Shipments will be sent C. O. D. if so desired.

These aquatic seeds are perishable and must reach their destination in the shortest possible time and should be shipped by express. If you wish shipment by Parcel Post or Prepaid Express please send sufficient money to cover same otherwise we will ship charges collect.

### GUARANTEE

We guarantee our seeds to grow and produce satisfactory results. If a complete planting or any portion fails to produce what you consider a satisfactory growth after allowing a sufficient time to grow and mature, we will agree to furnish an equal quantity to that which fails at one-half the list price.

You are the judge as to whether or not your planting has proven a success. If dissatisfied with the results, tell us about it and we will replace the order at half-price, or an equal value of any other planting materials you wish to select from our list at one-half list price.

### WISCONSIN AQUATIC NURSERIES

OSHKOSH, WISCONSIN

## Brownleaf Pondweed

Diving Ducks eat the brittle roots of this important Wild Duck Food. Shallow water Ducks feed on its wheat-like seeds at the waters surface. It is very hardy, grows in from one to six feet of water on either soft or firm bottom. Easily planted by mixing the seed with clay and broadcasting. Plant during fall months, it remains dormant a short time and the following year produces a growth. Ten pounds will plant one acre.

Seed \$1.25 per pound.

## Spatterdock



Spatterdock or yellow waterlily makes a fine duck attraction when planted in addition to other natural foods. Mallards and Blacks are very fond of the seeds.

Seed may be planted now in waters from 1 to 6 feet in depth. Six pounds to an acre.

PRICE \$2.50 PER POUND

## White Waterlily

An excellent food and cover plant for fish. White Waterlilies are very ornamental and will beautify the waters.

White Waterlily Tubers \$5.00 per 100

## Wapato Duck Potato

EXCELLENT DUCK COAXER

The Wapato Duck Potato is a very good all around Wild Duck Food. If the waters remain nearly the same level the year around, Mallards and other shallow water ducks will feed upon its tender shoots, tubers and seeds. In places where there is an overflow or the water deepens during fall and winter, Canvasbacks and other divers will feed upon Wapato.

Wapato propagates largely by tubers, planted during fall. Tubers planted this year will produce fully matured plants the following fall.

This plant is very hardy and will grow well in most any inland waters. It does the best in a fairly rich soil on damp lowlands, mud flats or in water from 1 inch to 1 foot in depth.

The tubers of the Wapato Duck Potato are very easily planted. One thousand tubers plant one acre.

Only \$8.00 per 1,000 Tubers;

\$1.25 per 100.

A 20% Cash Discount Off Prices Listed  
Complete Planting Instructions Furnished  
With Order

## American Lotus

The beautiful American Lotus has acorn-like seeds which are eaten by Mallards and other wild ducks. It grows from 1 to 3 feet above the surface of the shallow waters, providing shelter and nesting places for the ducks.

The flowers of the American Lotus are very beautiful, of a light yellow color often eight inches across. These are considered very rare although they are hardy and will grow in any quiet shallow waters where the bottom soil is fairly rich.

Now is nature's sowing season and the seeds will germinate better if they soak in water over winter. Fifteen pounds will plant one acre.

PRICE 50c PER POUND

## Deep Water Duck Potato

Another favorite food for all kinds of Wild Ducks. The diving ducks feed on it during fall in the deeper waters. Shoal water ducks eat it if the waters are low during fall. It is a rapid grower and produces abundantly of food. It has numerous acorn like tubers on its roots just beneath the bottom soils which the Wild Ducks glut themselves with. One can hardly drive the ducks away from a good bed of Deep Water Duck Potatoes and if they do leave it is only temporary, they soon return for more.

Plant the tubers in the fall. A soft mud bottom is best and will produce a luxuriant growth next year. One thousand tubers plants one acre.

\$1.50 per 100 tubers, \$10 per 1000







# OSHKOSH, WISCONSIN

## PROFESSIONAL SERVICE

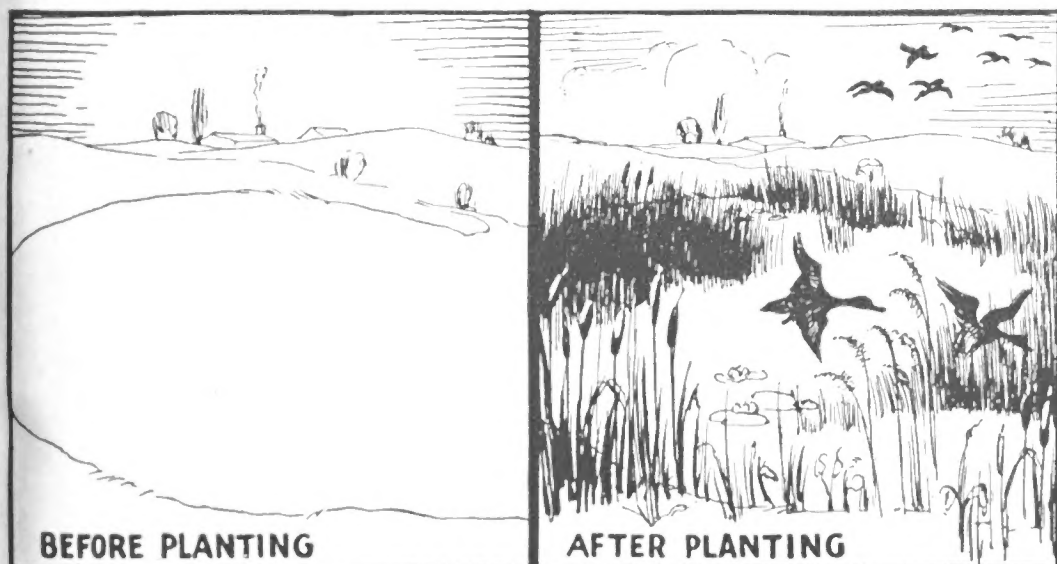
### **We Plan---Plant and Make Attractive Your Marshes--- Ponds or Streams**

The best method of procedure in developing an attractive feeding ground for either waterfowl, fish, or game is to employ the services of our expert to come and make a personal examination of the property and supervise the planting thereof. The owners of this firm are considered among the world's foremost experts in this work. We will examine the soils, test the waters, identify the botanical growth, determine what will grow and where to plant it to make a paradise for game or fish. Where Leagues or Associations plan to develop several lakes or properties, Clubs or private individuals controlling large areas wish to make plantings to the extent of \$300 or more we recommend this service for best and quickest results.

Perhaps you now have some natural foods growing in your waters or about the shores unbeknown to you, this service will eliminate the danger of duplicating in planting. It will insure the planting of the proper plants adapted to those particular water or soil conditions. Experimental planting on a large scale is often very costly. One experienced in planting these materials can often make the same quantity cover twice the area, with better results than the inexperienced. Proper planting is very important, it is the hinge upon which good results hang.

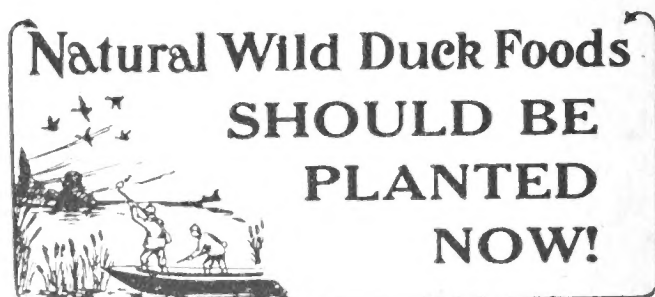
By having this service you will learn what grows there, its value, what we recommend planting, quantity, price and where as well as when to plant. During spring we are able to make investigations of properties and waters and supervise the planting work in one trip by telegraphing for materials after survey is completed and awaiting their express arrival. We often have several such contracts in a community and work from one preserve to another.

Our charge for this service is based on the size of the area and its distance from Oshkosh. When we are able to obtain several contracts in one state it enables us to quote a special low price, making this service very inexpensive. Write us for quotation on this service, we may have an expert in your vicinity now.



# QUALITY---SERVICE EXPERIENCE

Our materials are the best obtainable and are all guaranteed. Many of our customers say, "The prompt service the WISCONSIN AQUATIC NURSERIES give, their knowledge of Aquatic Foods derived through actual experience from inspecting and planting of private and public Hunting and Fishing Grounds and the Quality of materials that they supply can't be equalled by any firm in this kind of business."



## IF YOU WANT MORE WILD DUCKS, FISH AND OTHER GAME PLANT NOW.

Natural Foods are the secret of attracting large numbers of Waterfowl, fish or game and holding them over an extended period. Make a liberal planting. You can have thousands of Wild Ducks come to your property to every ten that come there now by providing their favorite foods. These aquatics reseed themselves and become a permanent attraction. The first cost is the only cost.

### ORDER EARLY

The Spring planting season will soon be here and over and we want to urge you to place your order soon. It may be necessary to disappoint many late customers again this year on account of shortage of materials. MATERIALS PLANTED THIS SPRING PRODUCE RESULTS THIS FALL, READY TO ATTRACT THE WILD DUCKS AND OTHER GAME.

## Large Game Preserve For Sale

New Hope Plantation; Winter Home, An Ideal Duck Preserve and Plantation. Location, Southeast Georgia, 66 miles South of Savannah, 12 miles north of Brunswick. Consists of 211 acres of high, dry, well drained land. Duck Preserve consists of slightly more than 450 acres. If interested write us, or Ed. T. Cole, our agent, Oshkosh, Wis., for further information.

## WISCONSIN AQUATIC NURSERIES

P. O. BOX 331

OSHKOSH, WISCONSIN, U. S. A.